

For Immediate Release

**Bridgestone Corporation**  
Global Public Relations Division  
1-1, Kyobashi 3-chome  
Chuo-ku, Tokyo 104-8340, Japan  
Phone: +81 3-6836-3333  
Fax: +81 3-6836-3184  
<https://www.bridgestone.com/>

## **Bridgestone Supplies New Mining Solution Service to BHP's Spence Mine Using Proprietary Tire Durability Algorithm**

- **Bridgestone is supplying a new mining solution service to the Spence copper mine in Chile that will estimate tire durability using a proprietary algorithm originally developed by Bridgestone.**
- **This new addition to Bridgestone's mining solution service proposes the optimal tire maintenance timing and driving routes for the mine to help lower tire-related costs and vehicle downtime.**
- **Through this new mining solutions offering, Bridgestone will deliver "Efficiency" and "Ecology" in alignment with the Bridgestone E8 Commitment.**

**Tokyo (November 9, 2023)**—Bridgestone Corporation today announced a new mining solution service to estimate tire durability using a proprietary algorithm originally developed by Bridgestone. The new offering was introduced in July 2023 to the Spence copper mine (Pampa Norte operation) in Chile, which is part of BHP Group Limited & Plc<sup>\*1</sup>. This service will be used to propose the optimal tire maintenance timing and driving routes for the mine.



Operations at mining site

Based on Bridgestone Mastercore,<sup>\*2</sup> Bridgestone supplies a range of mining solutions that help maximize the productivity and economic value of mining operations by combining real and digital capabilities. Now the company's mining solution is evolving to a new stage, which is to strengthen

tire wear life estimation using the algorithm originally developed by combining Bridgestone's extensive tire knowledge, industry experience, and digital capability. This solution service's algorithm utilizes fleet operating data securely provided by customers to help estimate tire durability, prevent tire damage caused by inappropriate tire maintenance, and propose the optimal tire maintenance timing and driving routes. The data used in these evaluations includes vehicle tire replacement history, as well as on tire temperature and pressure, vehicle location, driving speed, and other data collected from Bridgestone iTrack<sup>\*3</sup> next-generation mining vehicle tire monitoring system.<sup>\*4</sup> The service thereby contributes to customer value in the forms of lower tire-related costs and reduced vehicle downtime. It also contributes to sustainability through improved resource productivity and longer usage of tires.

The Spence mine now using Bridgestone's new mining solution service produces copper, which is an essential ingredient for electrification and is used in electric vehicles, housing and the manufacturing of products including whitegoods. The world needs more copper supply to meet expected demand over coming decades. Operations at the copper mine are required to optimize productivity to ensure reliable efficient supply to customers around the world.

Under such circumstances, unplanned tire repairs or changes caused by unpredicted tire damage can diminish efficiency of fleet operation, increase cost, and potentially increase environmental impacts. Bridgestone's algorithm provides notification of the optimal timings for maintenance by combining and analyzing vehicle operating data from the mine with data from Bridgestone iTrack and Bridgestone's tire-related expertise to predict tire abnormalities. We are also providing tools that help achieve the best tire pressure for various temperature ranges.

"At the Spence mine of BHP-Pampa Norte, we want to improve productivity and reduce waste while also improving the performance and extending the lifespan of our tires. In this context, we have partnered with Bridgestone to improve monitoring and management in order to sequence optimum maintenance and prevent unscheduled stoppages. We have thus started a new project that is incorporating management tools that are available through Bridgestone's new technology. We recognize Bridgestone's willingness to take the challenge, do what needs to be done, and propose improvements," said Carlos Ruz, Mine Production Manager, BHP Group Limited & Plc.

"This mining solution service is a new challenge for Bridgestone to take on. It combines our "Dan-Totsu"<sup>\*5</sup> products with data analysis based on our tire expertise to deliver new value to customers. I am incredibly pleased that this solution, which was realized through co-creation with the Spence mine of BHP-Pampa Norte, is contributing to improvements in operations. Going forward, Bridgestone will continue working to optimize mining operations and improve resource productivity with unique solutions that are closely tailored to client needs," said Nobuyuki Tamura,

Vice President and Senior Officer, Global Mining, Industrial, Construction and Aviation, Bridgestone Corporation.

Through the provision of mining solutions that combine digital technologies and services, Bridgestone strives to achieve the corporate commitments of "Efficiency: Committed to maximizing productivity through the advancement of mobility" and "Ecology: Committed to advancing sustainable tire technologies and solutions that preserve the environment for future generations" described in the "Bridgestone E8 Commitment."<sup>\*5</sup>

- \*1 BHP is a major global resource company based in Australia that mines iron ore, copper, and nickel at mines mainly located in Australia and South America.
- \*2 For more information, please refer to the news release entitled "New Bridgestone MasterCore Tire Line Provides Mine Sites With Customized Tire Performance."  
<https://www.bridgestone.com/corporate/news/2020080701.html>
- \*3 For more information, please refer to the news release entitled "Bridgestone Acquires iTrack Solutions Business from Transense Technologies."  
<https://www.bridgestone.com/corporate/news/2020062501.html>
- \*4 Bridgestone iTrack next-generation mining equipment tire monitoring system is capable of obtaining the tire temperature and air pressure data collected by conventional air pressure monitoring systems as well as location, speed, and other equipment data.
- \*5 "Dan-Totsu" refers to Bridgestone's direction to be the clear and absolute leader Footnote
- \*6 The Bridgestone Group established its corporate commitment, the "Bridgestone E8 Commitment," to help it realize its vision: "Toward 2050, Bridgestone continues to provide social value and customer value as a sustainable solutions company." This commitment will serve as the Group's axis to drive management while earning the trust of future generations. The "Bridgestone E8 Commitment" consists of eight uniquely Bridgestone values starting with the letter "E" (Energy, Ecology, Efficiency, Extension, Economy, Emotion, Ease, and Empowerment) that the Group will commit to creating through distinctly Bridgestone purposes and processes, together with employees, society, partners, and customers to help realize a sustainable society.  
<https://www.bridgestone.com/corporate/news/pdf/2022030101.pdfFootnote>

**About Bridgestone Corporation:**

*Bridgestone is a global leader in tires and rubber building on its expertise to provide solutions for safe and sustainable mobility. Headquartered in Tokyo, the company employs approximately 130,000 people globally and conducts business in more than 150 countries and territories worldwide. Bridgestone offers a diverse product portfolio of premium tires and advanced solutions backed by innovative technologies, improving the way people around the world move, live, work and play.*

###